

In Russia, a hydrogen dump truck was developed for quarries

At the Center for Scientific Communication, the MITs reported that Russian experts presented a project for the transfer of career dump trucks to hydrogen fuel. For two years, on the basis of the BELAZ-7530 model, it is planned to create an experimental sample with a hybrid power plant with a capacity of 1 MW.

The new system includes four hydrogen fuel elements of 240 kW · h, the supercondensitors block per 100 kW and batteries with a capacity of 500 kW · h. Low -carbon hydrogen obtained from metallurgical production waste will be used as fuel.

Now in the Russian mining industry more than 2000 diesel diesel engines with a carrying capacity of 110 tons. Each such machine consumes about 3.7 tons of fuel daily, releasing harmful emissions – carbon dioxide, soot, sulfur and nitrogen compounds. This negatively affects both the ecology and the health of workers.

According to Vladislav Karasevich from MIPT, the transition to hydrogen technologies will reduce occupational diseases, increase overhaul intervals and increase the efficiency of equipment.

The project was developed by MIPT engineers as part of the program to create autonomous energy systems.